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Filed : August 16, 2001

REMARKS

Claims 1-12 and 15-42 are presented for examination. Claims 13 and 14 are cancelled, Claims 1 and 15 have been amended and Claims 27-42 have been added. Support for the amendment to Claim 1 can be found in paragraph [110], for example. Support for the amendment to Claim 15 can be found in paragraphs [0033], [0034], [0063] and Figures 14A and 14B, for example. Support for new Claims 27-42 can be found in paragraphs [0053] and [0054], for example. Accordingly, no new matter has been added. Reconsideration of the present case is respectfully requested.

Summary of Interview

Applicants wish to thank the Examiner for allowing Applicants to conduct an interview on August 13, 2003 to discuss the pending claims and the scope of the cited art. While no agreement with respect to the claims was reached, potential amendments were discussed to define the invention in view of the art cited in the May 30, 2003 Office Action.

Discussion of Rejection Under 35 U.S.C. § 102

The Examiner has rejected Claims 1-3 and 5-12 under 35 U.S.C. § 102(e) as being anticipated by Walt et al. (U.S Patent No. 6,327,410 B1).

To be anticipatory under 35 U.S.C. § 102, a reference must teach each and every element of the claimed invention. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379 (Fed. Cir. 1986). “Invalidity for anticipation requires that all of the elements and limitations of the claim are found within a single prior art reference. ...There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” *See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991).

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Applicants respectfully disagree with the basis of this rejection because the Examiner has failed to cite a specific passage in Walt et al. that teaches each and every limitation of the rejected claims. As discussed during the Interview on April 13, 2003, the specific passages that the Examiner has cited, Column 5, line 59-Column 6, line 3, and Column 6, lines 48-61, do not teach an adhesive layer disposed between a rigid support and a molded layer. The passages referred to by the Examiner relate to an adhesive that binds microspheres to a substrate, and not an adhesive that binds a molded layer to a rigid support in order to maintain the molded layer in a planar configuration.

Maintaining the moldable layer in a planar configuration provides many advantages. As is known in the art, many detection techniques, such as fluorescence detection, for example, rely on a very shallow depth of field detection. Examples of these methods include the use of CCD cameras or confocal microscopes. Since many molded materials cannot be made sufficiently flat for such detection methods, adhering the moldable layer to a rigid support provides the moldable layer with an advantageous flat configuration. This is especially advantageous when the molded material is relatively thin, (*e.g.*, having a thickness of between 50 μ m to 1mm). These specific advantages are disclosed in the specification in paragraphs [0053] and [0063], for example. For all of the above reasons, Applicants respectfully request withdrawal of the rejections of Claims 15-17 and 19-24 under 35 U.S.C. § 103.

As the rejected claims expressly recite that the “adhesive layer” is disposed between the molded layer and the rigid support, the passages from Walt et al. do not teach the elements of Claims 1-3 and 5-12. For this reason, Applicants respectfully request the withdrawal of this rejection.

Discussion of Rejection Under 35 U.S.C. § 103

The Examiner rejected Claims 4, 15-17, and 19-24 under 35 U.S.C. § 103(a) as being unpatentable over Virtanen (U.S. Patent No. 6,342,349 B1) in view of Walt, et al. Furthermore, the Examiner rejected Claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Virtanen, Walt, et al., and further in view of Zager et al. (U.S. Patent No. 5,466,319).

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To establish a *prima facie* case of obviousness a three-prong test must be met. First, there must be some suggestion or motivation, either in the references or in the knowledge generally available among those of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success found in the prior art. Third, the prior art must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Claim 4, like Claims 1-3 and 5-12, recites an adhesive layer disposed between a molded layer and a rigid support. For the reasons discussed above, Applicants argue that in Walt et al., does not teach an adhesive layer adhering a rigid support to a molded layer. Moreover, Virtanen does not cure this defect, as this reference does not teach adhesives in any configuration. Thus, Applicants respectfully submit that the Examiner has not shown that the combination of Walt, et al. and Virtanen alone or in combination teach each and every claim limitation. Accordingly, Claim 4 is not obvious in view of this combination of art and Applicants respectfully request withdrawal of this rejection.

With respect to Claims 15-17 and 19-24, each of these claims recite a method for making an array composition by applying a layer of adhesive to adhere the molded layer to a rigid support in order to maintain the molded layer in a planar configuration. As discussed above, neither of the cited references teach this step. Specifically, the Examiner has failed to show that Walt et al., or Virtanen disclose applying a layer of adhesive between the moldable layer and the rigid support. Further, Virtanen fails to disclose maintaining a moldable layer in a planar configuration. As shown in Virtanen, the upper layer is a thin film that is used as a barrier on top of a set of assay wells. The upper layer is designed to mold to the non-planar configuration of the array structure. Thus, the upper layer in Virtanen takes the shape of the wells present in the underlying rigid support, and is thereby not planar.

Applicants respectfully submit that the cited art also fails to teach all of the limitations of Claim 18, for essentially the same reasons as discussed above. Specifically, the Examiner has not shown that Walt et al., Virtanen, or Zager et al. teach a method for making an array composition comprising the step of applying a layer of adhesive between the moldable layer and

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the support structure in order to maintain the molded layer in a planar configuration. For this reason, Applicants respectfully request withdrawal of the rejection of Claim 18.

In addition, the cited art differs from new Claims 27-42 which recite “a molded layer having an upper surface and a planar lower surface” and “a rigid support adhered to said planar lower surface and adapted to maintain said molded layer in a planar configuration”. There is no evidence that the cited references, either alone or in combination, teach an array with this structure. Specifically, the cited passage of Walt et al. and Virtanen fail to teach adhering (*e.g.*, holding together by fusion, suction, or grasping) a planar lower surface of a moldable layer to a rigid support so that the rigid support maintains the molded layer in a planar configuration. For this reason, Applicants respectfully request allowance of new Claims 27-42 over the cited art.

CONCLUSION

Applicants have endeavored to address all of the Examiner’s concerns as expressed in the outstanding Office Action. Accordingly, amendments to the claims, the reasons therefor, and arguments in support of the patentability of the pending claim set are presented above. Any claim amendments which are not specifically discussed in the above remarks are made in order to improve the clarity of claim language, to correct grammatical mistakes or ambiguities, and to otherwise improve the capacity of the claims to particularly and distinctly point out the invention to those of skill in the art. In light of the above amendments and remarks, reconsideration and withdrawal of the outstanding rejections is specifically requested.

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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410. If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to initiate the same with the undersigned.

Respectfully submitted,

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Dated: September 29, 2003

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